

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: DRAFT

Region: Mooresville Regional Office
County: Gaston
NC Facility ID: 3600026
Inspector's Name: Melinda Wolanin
Date of Last Inspection: 10/09/2018
Compliance Code: 3 / Compliance - inspection

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): Valley Proteins, Inc. – Gastonia Division</p> <p>Facility Address: Valley Proteins, Inc. – Gastonia Division 5533 South York Road Gastonia, NC 28052</p> <p>SIC: 2077 / Animal And Marine Fats And Oil NAICS: 311613 / Rendering and Meat Byproduct Processing</p> <p>Facility Classification: Before: Title V After: Fee Classification: Before: Title V After:</p>	<p style="text-align: center;">Permit Applicability (this application only)</p> <p>SIP: 02D .0503, .0515, .0516, .0521, .0524, .0539, .1100, .1111, .1407 02Q .0317 NSPS: Dc, NESHAP: GACT JJJJJ PSD: PSD Avoidance: SO₂, CO, NAA NSR, Air Toxics NC Toxics: 02D .1100 112(r): Other: RACT</p>
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Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	
Chris Harris Environmental Manager (704) 773-9962 5533 South York Road Gastonia, NC 28052	Greg Thompson General Manager (980) 251-0162 5533 South York Road Gastonia, NC 28052	Matt Haynes District Environmental Manager (910) 289-2083 1309 Industrial Dr Fayetteville, NC 28301	<p>Application Number: 3600026.15C Date Received: 05/15/2015 Application Type: Renewal/Modification Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 03590/T34 Existing Permit Issue Date: 10/05/2015 Existing Permit Expiration Date: 02/28/2016</p>

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2017	0.0800	13.65	6.26	11.46	0.2500	0.2566	0.2457 [Hexane, n-]
2016	0.0900	15.17	6.03	12.74	0.2900	0.2852	0.2731 [Hexane, n-]
2015	1.60	23.42	9.55	18.95	2.19	0.4136	0.3929 [Hexane, n-]
2014	8.85	23.50	9.69	18.45	2.40	0.4126	0.3903 [Hexane, n-]
2013	0.2300	22.87	10.87	19.17	2.00	0.4266	0.4083 [Hexane, n-]

<p>Review Engineer: Jenny Sheppard</p> <p>Review Engineer's Signature: _____ Date: DRAFT</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 03590/T35 Permit Issue Date: DRAFT Permit Expiration Date: DRAFT</p>
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1. Purpose of Application:

This permit modification is a renewal of an existing Title V permit for Valley Proteins, Inc. – Gastonia Division. The existing Title V permit number **03590T34** was issued on October 5, 2015 and was scheduled to expire on February 28, 2016. The renewal application was postmarked/received on May 15, 2015, or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied pursuant to 2Q .0513.

A renewal application update was received December 16, 2016. The update voided several 502(b)(10) requests and a few other minor changes for control device ducting for the feather system which have been incorporated into the draft permit.

2. Facility Description

Valley Proteins, Inc. - Gastonia Division is a rendering plant that processes mostly chicken blood, offal and feathers as raw material for animal feed.

3. History/Background/Application Chronology

March 30, 2011 – Permit 03590T32, TV Renewal.

April 25, 2013 – Permit 03590T33, State Only Modification

January 20, 2015 – 502(b)(10) notification (January 29)

May 15, 2015 – Permit renewal request received

August 3, 2015 – 502(b)(10) notification (August 4)

October 5, 2015 – Permit 03590T34, Minor Modification

December 16, 2016 – 502(b)(10) notification (December 20) and Title V Renewal application update.

4. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Page(s)	Section	Description of Change(s)
All	All	Changed Facility name to Valley Proteins, Inc – Gastonia Division Update dates and permit revision number. adding 0 to 2D and 2Q
Insignificant Activities	Attachment	Added HIVAC System with integral cartridge filter to vacuum up the protein dust (ID No. IHS)
3 thru 6	1	Added reference to GACT JJJJJ to Boilers ES-1, ES-2, ES-3 and ES-15. Modified control device systems to allow vapor to be routed to the air cooled condensers for ES-9 and ES-9a
7 thru 10	2.1 A	Added GACT JJJJJ to Regulation table Updated 02D .0503, 02D .0516, and 02D .0521 to newer format (adding 0 to 2D and 2Q, removing [15A NCAC 2D .05XX] for all paragraph a. Updated monitoring and reporting requirements for 02D .0521. Updated reporting for 02D .0524.

Page(s)	Section	Description of Change(s)
11 thru 16	2.1 B	Added GACT JJJJJ to Regulation table Updated 02D .0503, 02D .0516, and 02D .0521 to newer format (adding 0 to 2D, removing [15A NCAC 2D .05XX] for all paragraph a. Updated testing requirements for 02D .0516, added the no monitoring required from the firing of natural gas, No. 2 fuel oil, approved waste oil or saleable fat (paragraph (c)). Updated recordkeeping and reporting requirements to current language. Updated monitoring and reporting requirements for 02D .0521. Updated reporting for 02D .0524. Updated reporting for 02D .1407
16 thru 19	2.1 C	Updated 02D .0515, 02D .0521, and 02D .0539 to newer format (adding 0 to 2D, removing [15A NCAC 2D .05XX] for all paragraph a. Updated testing requirements for 02D .0515. Updated recordkeeping and reporting requirements to current language. Updated testing, monitoring and reporting requirements for 02D .0521.
19 thru 21	2.1 D	Updated 02D .0515, 02D .0521, and 02D .0539 to newer format (adding 0 to 2D, removing [15A NCAC 2D .05XX] for all paragraph a. Updated testing requirements for 02D .0515. Updated recordkeeping and reporting requirements to current language. Updated testing, monitoring, recordkeeping, and reporting requirements for 02D .0521.
22 thru 25	2.2 A	Updated testing and reporting for 02Q .0317 of 02D .0530 (SO ₂ and CO) 503, 02D .01111, added GACT JJJJJ language for 4 boilers.
26 thru 27	2.2 B	Added "0" to 2D, corrected paragraph ordering.
27 thru 30	2.2 C	Updated condenser descriptions in paragraph l.
30 thru 38	3	Updated General Conditions (v5.3 08/21/18)

5. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers
15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 02D .0521, Control of Visible Emissions
15A NCAC 02D .0524, New Source Performance Standards for 40 CFR 60 Subpart Dc
15A NCAC 02D .0539, Odor Control of Feed Ingredient Manufacturing Plants
15A NCAC 02D .1111, NESHAP for HAPs for Area Sources: Industrial, Commercial, and Institutional Boilers
15A NCAC 02D .1407, Standards for Nitrogen Oxides; Boilers and Indirect Process Heaters
15A NCAC 02Q .0317, Avoidance Conditions (15A NCAC 02D .0530, .0531, .1407(b)(for NO_x), Prevention of Significant Deterioration, SO₂, CO, 02D .1100)

A regulatory review for these current permit conditions will not be included in this document except for 40 CFR 63, Subpart JJJJJ (added at this renewal) as the applicability to these has not changed from when it was originally established. Where applicable, the permit conditions have been modified to reflect current working shell conditions.

15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.11193, 63.11194(a)(1), (b), 63.11200(c)]

- a. For these sources (**ID No. ES-1, ES-2, ES-3, and ES-15**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology"

as promulgated in 40 CFR 63, Subpart JJJJJ, " National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

General Provisions

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart JJJJJ.

Compliance Dates

- d. The Permittee shall achieve compliance with the initial tune up and energy assessment requirements no later than March 21, 2014. [40 CFR 63.11196(a)(1), (a)(3), 63.11210(c)]

Notification of Compliance Status

- e. The Permittee shall submit a Notification of Compliance Status no later than July 19, 2014.
 - i. The Notification of Compliance Status must be signed by a responsible official and include the following certifications of compliance:
 - (A) "This facility complies with the requirements in 40 CFR 63.11214 (i.e., Section 2.2 A.2.g) to conduct an initial tune-up of the boiler."
 - (B) "This facility has had an energy assessment of the boiler and its energy use systems performed according to Table 2 to this subpart and that the assessment is an accurate depiction of the facility at the time of the assessment or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended."
 - (C) "No secondary materials that are solid waste were combusted in any affected unit."
 - ii. The notification must be also submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.
 - iii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements are not met.

General Compliance Requirements

- f. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Performance Tune-up Requirements

- g. The Permittee shall conduct an initial tune-up of the boiler and subsequent tune-ups biennially.
 - i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up.
 - ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
 - iii. The tune-ups shall be conducted according to the following procedures:
 - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
 - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

- (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
- (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
[40 CFR 63.11201(b), Table 2, 40 CFR 63.11223(a), (b)]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements are not met.

Energy Assessment Requirements

- h. The Permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following items, with the extent of the evaluation for items (i) to (iv) appropriate for the on-site technical hours listed in 40 CFR 63.11237:
 - i. A visual inspection of the boiler system,
 - ii. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
 - iii. An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
 - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
 - v. A list of major energy conservation measures that are within the facility's control,
 - vi. A list of the energy savings potential of the energy conservation measures identified, and
 - vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
[40 CFR 63.11201(b), Table 2]
 - viii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements are not met.

Recordkeeping

- i. The Permittee shall maintain the following records:
 - i. As required in 40 CFR 63.10(b)(2)(xiv), the Permittee shall keep a copy of each notification and report that was submitted to comply with this rule and all documentation supporting any Notification of Compliance Status that was submitted.
 - ii. The Permittee shall maintain on-site and submit, if requested by the Administrator, a report containing the following information:
 - (A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (B) A description of any corrective actions taken as a part of the tune-up of the boiler.
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
 - iii. The Permittee shall keep the following records to document conformance with the applicable requirements:
 - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - (B) The Permittee shall keep a copy of each boiler energy assessment report.
 - (C) Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.

- (D) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- (E) For operating units that combust non-hazardous secondary materials (e.g. saleable fat) that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If you combust a fuel (e.g. saleable fat) that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel (e.g., saleable fat) received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, you must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).
[40 CFR 63.11225(c), 63.11223(b)(6)]
- iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements are not met.
- j. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Reporting

- k. The reporting requirements of 40 CFR 63.11225(b) shall be met by complying with General Condition P the permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements are not met.

Reporting Requirements

- l. The Permittee shall submit compliance reports to the DAQ on a 2-year basis. The first report shall cover the period beginning on the May 20, 2019 and ending on December 31, 2020. The first report shall be postmarked on or before January 30, 2021. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the subsequent compliance reports postmarked on or before January 30 for the previous 24-month period.
 - i. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- m. The compliance report must contain the following information:
 - i. company name and address;
 - ii. process unit information, emissions limitations, and operating parameter limitations;
 - iii. date of report and beginning and ending dates of the reporting period;
 - iv. include the date of the most recent tune-up for each unit required according to paragraph g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
 - v. statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in paragraphs l through m are not met.

6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NESHAPS/MACT/112i – The Permittee is currently subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Industrial, Commercial, and Institutional Boilers under 40 CFR 63, Subpart JJJJJJ. There are no changes other than those discussed above to the requirements for this permit renewal and continued compliance is expected.

112(r) – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

CAM – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. A Compliance Assurance Monitoring Plan review was conducted as part of the renewal of the permit in 2011. In the review, it was determined that for the emission sources that were currently installed that a CAM plan was not required at that time. Since 2011, the facility has not modified or added any emission sources that have pre-controlled emissions above the major threshold. The compliance assurance monitoring (CAM) rule requires owners and operators to conduct monitoring to provide a reasonable assurance of compliance with applicable requirements under the act. Monitoring focuses on emissions units that rely on pollution control device equipment to achieve compliance with applicable standards. An emission unit is subject to CAM, under 40 CFR Part 64, if all of the following three conditions are met:

- The unit is subject to any (non-exempt, e.g., pre-November 15, 1990, Section 111 or 112 standard) emission limitation or standard for the applicable regulated pollutant.
- The unit uses any control device to achieve compliance with any such emission limitation or standard.
- The unit's pre-control potential emission rate exceeds 100 percent of the amount required for a source to be classified as a major source; i.e., either 100 tpy (for criteria pollutants) or 10 tpy of any individual/25 tpy of any combination of HAP.

There were no modifications or additions of emission sources that since the last review therefore a CAM review is not needed at this time.

7. Facility Wide Air Toxics

Currently this facility has conditions for 02Q .0317 Avoidance Condition for 02Q .0700 and 02D .1100. There are no changes to these conditions as a result of the renewal.

8. Facility Compliance Status/Compliance History:

The facility was last inspected by Melinda Wolanin of the MRO on October 19, 2018. Based on her observations and records review, the facility was found to be in compliance.

A compliance inspection was performed by Melinda Wolanin of the MRO on October 31, 2017 and appeared to be in compliance.

A compliance inspection was performed by Melinda Wolanin of the MRO on November 17, 2016 and appeared to be in compliance.

A compliance inspection was performed by Melinda Wolanin of the MRO on November 6, 2015 and appeared to be in compliance.

9. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time

notice is provided to the public under 02Q .0521 above. The State of Virginia and the Forsyth County Local Program are affected state/local program within 50 miles of the facility.

The following comments were received: No additional comments received.

10. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for the renewal application.

A consistency determination was not required for the renewal application.

MRO recommends issuance of the permit and was sent a DRAFT permit prior to issuance.

RCO concurs with MRO's recommendation to issue the renewed air permit.